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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,021	02/02/2001	Geoffrey B. Rhoads	P0305	7386
23735	7590	08/26/2004	EXAMINER	
DIGIMARC CORPORATION 19801 SW 72ND AVENUE SUITE 250 TUALATIN, OR 97062			PYZOCHA, MICHAEL J	
ART UNIT		PAPER NUMBER		5
2137				

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/776,021	RHOADS, GEOFFREY B.
	<b>Examiner</b>	<b>Art Unit</b>
	Michael Pyzocha	2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 02 February 2001.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-44 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-44 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 02 February 2001 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 .

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-44 are pending.

***Claim Objections***

2. Claims 21 and 33 are objected to because of the following informalities: they recite "a photographer of the photographer" which should be "a photographer of the photographic image". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 22 and 30-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claims 22, 30, 34, and 40, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

6. Any claims not specifically addressed are rejected by virtue of their dependencies.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 18-21, 23-24, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Barton (U.S. 5,646,997).

As per claim 18, Barton discloses encoding a photograph with a steganographic message, (see column 6 lines 51-60), the message identifies a corresponding message in a database (see column 2 lines 64-67), and the database record detailing information relating to the photograph (see column 6 lines 51-60).

As per claim 19, Barton discloses the message comprising an index number (see column 6 lines 51-60).

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As per claim 20, Barton discloses the information identifies the person associated with the corresponding image (see column 6 lines 51-60).

As per claim 21, Barton discloses the person being the photographer (see column 6 lines 51-60 where "the creator of the block" would be the photographer; the creator of the image).

As per claim 23, Barton discloses the steganographic message conveying plural digital bits (see column 6 lines 51-60).

As per claim 24, Barton discloses the message being dispersed across the corresponding image (see column 7 lines 31-33).

As per claim 28, Barton discloses a computer storage medium having computer instructions for performing the method (see column 9 lines 48-55).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

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person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6, 9-16, 29-33, 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton and further in view of NEKO (webpage poster).

As per claim 1, Barton discloses encoding an image with a steganographic message (see column 6 lines 51-60 where the data block can be an image as described in column 4 lines 58-65 and a photographic image is described in column 1 lines 23-33) and the steganographic message associates information with each image (see column 6 lines 51-60 where the meta-data is associated with each image).

Barton fails to disclose the creation of a photo collage with plural photographic images printed on a common page.

However, NEKO discloses a photographic collage with multiple images (see NEKO page 1).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the steganographic process of Barton with the creation of NEKO's photo collage.

Motivation to do so would have been to prevent the unauthorized use and distribution of a document (see Barton column 1 lines 45-51).

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As per claim 2, the modified Barton and NEKO method discloses the information identifies the person associated with the corresponding image (see Barton column 6 lines 51-60).

As per claim 3, the modified Barton and NEKO method discloses the person being the photographer (see Barton column 6 lines 51-60 where "the creator of the block" would be the photographer; the creator of the image).

As per claim 4, the modified Barton and NEKO method discloses the information associated with each image being stored as a record in a database (see Barton column 2 lines 64-67 where the meta-data is as described in column 6 lines 51-60).

As per claim 5, the modified Barton and NEKO method discloses the steganographic message conveying plural digital bits (see Barton column 6 lines 51-60).

As per claim 6, the modified Barton and NEKO method discloses the message being dispersed across the corresponding image (see Barton column 7 lines 31-33).

As per claim 9, the modified Barton and NEKO method discloses a computer storage medium having computer instructions for performing the method (see Barton column 9 lines 48-55).

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As per claim 10, the modified Barton and NEKO method discloses a photo collage being produced (see NEKO page 1).

As per claim 11, the modified Barton and NEKO method discloses a storage medium having a photo collage stored on it with plural photographic images (see NEKO page 1), each embedded with a steganographic message and the messages associate information corresponding to each image (see Barton column 6 lines 51-60).

As per claim 12, the modified Barton and NEKO method discloses the information identifies the person associated with the corresponding image (see Barton column 6 lines 51-60).

As per claim 13, the modified Barton and NEKO method discloses the person being the photographer (see Barton column 6 lines 51-60 where "the creator of the block" would be the photographer; the creator of the image).

As per claim 14, the modified Barton and NEKO method discloses the information associated with each image being stored as a record in a database (see Barton column 2 lines 64-67 where the meta-data is as described in column 6 lines 51-60).

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As per claim 15, the modified Barton and NEKO method discloses the steganographic message conveying plural digital bits (see Barton column 6 lines 51-60).

As per claim 16, the modified Barton and NEKO method discloses the message being dispersed across the corresponding image (see Barton column 7 lines 31-33).

As per claim 29, the modified Barton and NEKO method discloses a photo collage being produced (see NEKO page 1).

As per claim 30, the modified Barton and NEKO method discloses a storage medium with a photograph represented on it (see Barton column 1 lines 15-32 and NEKO page 1), encoding a photograph with a steganographic message, (see Barton column 6 lines 51-60), the message identifies a corresponding message in a database (see Barton column 2 lines 64-67), and the database record detailing information relating to the photograph (see Barton column 6 lines 51-60).

As per claim 31, the modified Barton and NEKO method discloses the message comprising an index number (see Barton column 6 lines 51-60).

As per claim 32, the modified Barton and NEKO method discloses the information identifies the person associated

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with the corresponding image (see Barton column 6 lines 51-60).

As per claim 33, the modified Barton and NEKO method discloses the person being the photographer (see Barton column 6 lines 51-60 where "the creator of the block" would be the photographer; the creator of the image).

As per claim 35, the modified Barton and NEKO method discloses the steganographic message conveying plural digital bits (see Barton column 6 lines 51-60).

As per claim 36, the modified Barton and NEKO method discloses the message being dispersed across the corresponding image (see Barton column 7 lines 31-33).

11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barton as applied to claim 18 above, and further in view of Tetricks et al (U.S. 4,675,746).

As per claim 22, Barton fails to disclose the information relating to the photograph including contact information.

However Tetricks et al discloses the information relating to the photograph including contact information (see column 5 lines 4-22 where the alphanumeric data is as described in column 2 lines 64-66).

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the contact information of Tetrick et al with the method for encoding a message of Barton.

Motivation to do so would have been to allow for confirming the authenticity of the image (see Tetrick et al column 5 lines 14-17).

12. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton as applied to claim 18 above, and further in view of Braudaway et al (U.S. 5,530,759).

As per claim 25, the modified Barton and NEKO method fails to disclose the use of pseudo-random noise when encoding.

However Braudaway et al discloses the use of pseudo-random noise when encoding (see column 5 lines 41-60).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the pseudo-random noise of Braudaway et al when encoding the message of Barton.

Motivation to do so would be to adjust the difficulty of removing the message (see column 5 lines 48-56).

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As per claims 26, the modified Barton and Braudaway et al method discloses the encoding changes the luminance of a majority of the pixels in each photographic image (see Braudaway et al column 2 lines 6-14 and column 5 lines 6-15).

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barton as applied to claim 18 above, and further in view of Bianco (U.S. 4,359,633).

As per claim 27, Barton fails to disclose the steganographic message is a code pre-exposed on emulsion media, onto which a photograph is later exposed.

However Bianco discloses a code pre-exposed on emulsion media, onto which a photograph is later exposed (see column 4 line 65 through column 5 line 12).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the method of adding a code to an emulsion media with Barton's method.

Motivation to do so would have been to enhance the reproducitively of the code (see Bianco column 5 lines 7-12).

14. Claims 7-8, 17, 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified

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Barton and NEKO method as applied to claims 1, 11, 30 above, and further in view of Braudaway et al (U.S. 5,530,759).

As per claims 7, 17, and 37 the modified Barton and NEKO method fails to disclose the use of pseudo-random noise when encoding.

However Braudaway et al discloses the use of pseudo-random noise when encoding (see column 5 lines 41-60).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the pseudo-random noise of Braudaway et al when encoding the message of the modified Barton and NEKO method.

Motivation to do so would be to adjust the difficulty of removing the message (see column 5 lines 48-56).

As per claims 8 and 38, the modified Barton, NEKO and Braudaway et al method discloses the encoding changes the luminance of a majority of the pixels in each photographic image (see Braudaway et al column 2 lines 6-14 and column 5 lines 6-15).

15. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Barton and NEKO method as applied to claim 30 above, and further in view of Tetrick et al (U.S. 4,675,746).

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As per claim 34, the modified Barton and NEKO method fails to disclose the information relating to the photograph including contact information.

However Tetrick et al discloses the information relating to the photograph including contact information (see column 5 lines 4-22 where the alphanumeric data is as described in column 2 lines 64-66).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the contact information of Tetrick et al with the method for encoding a message of Barton and NEKO.

Motivation to do so would have been to allow for confirming the authenticity of the image (see Tetrick et al column 5 lines 14-17).

16. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Barton and NEKO method as applied to claim 30 above, and further in view of Bianco (U.S. 4,359,633).

As per claim 39, the modified Barton and NEKO system fails to disclose the steganographic message is a code pre-exposed on emulsion media, onto which a photograph is later exposed.

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However Bianco discloses a code pre-exposed on emulsion media, onto which a photograph is later exposed (see column 4 line 65 through column 5 line 12).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the method of adding a code to an emulsion media with the Barton and NEKO method.

Motivation to do so would have been to enhance the reproducitively of the code (see Bianco column 5 lines 7-12).

17. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton and further in view of Conner et al (U.S. 5,579,393).

As per claim 40, Barton discloses storing an image (see column 1 lines 15-32), encoding a photograph with a steganographic message, (see column 6 lines 51-60), and the message aids in the authentication of the image (see column 5 lines 58-67).

Barton fails to disclose the images specifically being medical images.

However, Conner et al discloses the use of medical images (see column 2 lines 19-39).

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the method of authentication from Barton with the medical files of Conner et al.

Motivation to do so would have been to reduce the chances of fraudulent medical documents being transferred (see Conner et al column 1 lines 53-65).

As per claim 41, the modified Barton and Conner et al discloses the message aiding in protecting the image from tampering (see Barton column 5 lines 32-41).

As per claim 42, the modified Barton and Conner et al discloses the message being dispersed across the corresponding image (see Barton column 7 lines 31-33).

18. Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Barton and Conner et al method as applied to claim 40 above, and further in view of Braudaway et al.

As per claim 43, the modified Barton and Conner et al method fails to disclose the use of pseudo-random noise when encoding.

However Braudaway et al discloses the use of pseudo-random noise when encoding (see column 5 lines 41-60).

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the pseudo-random noise of Braudaway et al when encoding the message of the modified Barton and Conner et al method.

Motivation to do so would be to adjust the difficulty of removing the message (see column 5 lines 48-56).

As per claim 44, the modified Barton, Conner et al and Braudaway et al method discloses the encoding changes the luminance of a majority of the pixels in each photographic image (see Braudaway et al column 2 lines 6-14 and column 5 lines 6-15).

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:30am - 5:00pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP

  
Andrew Caldwell  
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